

notes from call with Region 8 to discuss details of Duff burns
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Cc: Deborah McKean, robert.j.medler, Victor Ketellapper

12/13/2011 12:11 PM

Here are my notes from the call we had at 1 PM Eastern on 12/13/11 to discuss details of test conditions for the duff burns based on preliminary scoping tests.

Attending: Paul L, Dahman T., Charley W., Dan W., Bill B., Bob M., Christina P., Deb M., Robert E.

- ARCADIS completed preliminary duff burn scoping tests using material gathered at EPA campus in RTP (see attached PPT)
- proposed high T condition - propane burner on, basket of burning duff just above burner, natural draft up and through burning bed of duff -- ranges from 1300-1600 F or higher based on average of 5 thermocouples (flaming combustion regime)
- proposed low T condition - propane burner off, basket of burning duff on slab, no natural draft (pile combustion) -- ranges from 1000-1200 F based on average of 5 thermocouples (smoldering combustion regime).
- concurrence was reached on the test conditions
- discussed number of samples -- including bottom ash samples from each run and wipe samples from each test condition
- discussed how we're doing total filterable PM and PM2.5 (no PM10 sampling)
- Dahman will send some information about dilution air flow rate, air exchange rates, and exhaust duct flow rates
- EPA QA Auditor contractors on site on Monday Dec 19
- discussion of need to verify that TEM analysis can occur based on first run day. The plan is to:
 - * complete first day run (nominally Dec 19)
 - * FedEx asbestos filter sample to EMSL (Region 8 will supply shipping address and analyst name to send it to)
 - * Region 8 will contact EMSL to get the analyst to take a quick look at the filter and verify ability to quantify LA fibers
 - * We will have a call on Wednesday Dec 21 at 3 PM eastern to discuss the preliminary results and make decision to proceed or to make corrections in methods
- Other than the first day's filter sample, other samples will be held onto and shipped to their destination at once.
- Region 8 will send SOP for recovering filters and packaging for shipment -- tricky procedure
- We will mod the QAPP to include this discussion

Action Items:

- ARCADIS - mod QAPP to reflect discussions from this meeting and preliminary scoping results
- ARCADIS - send info on dilution air flow rate, air exchange rates, and exhaust duct flow rates based on earlier tests on Burn Hut
- Region 8 - send shipping address and analyst at EMSL for receipt of filter
- Region 8 - send SOP for recovery and packing of filters for shipment
- Region 8 - contact EMSL analyst and give them a heads up about taking a quick look at the filter as soon as it arrives



Libby OUS Burn Chamber Scoping Test.pptx

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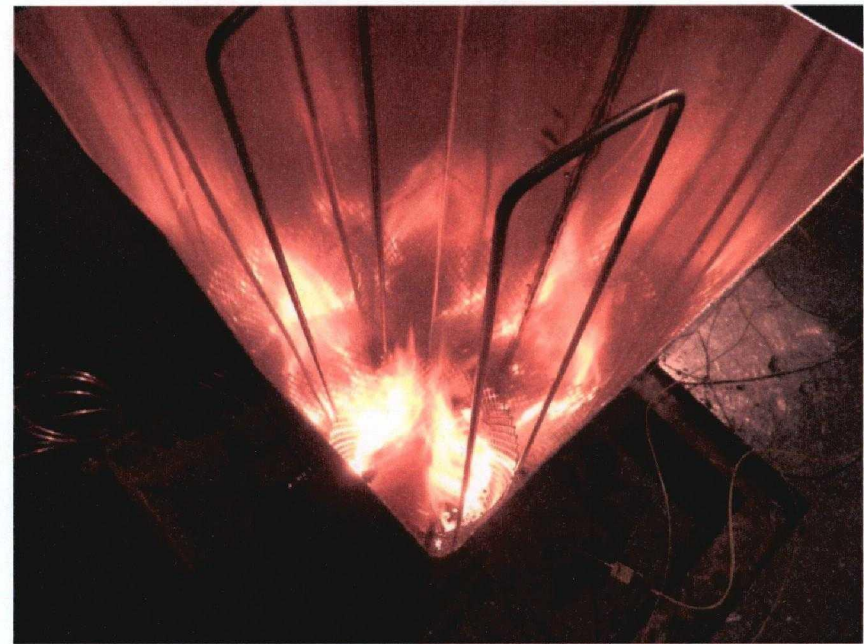
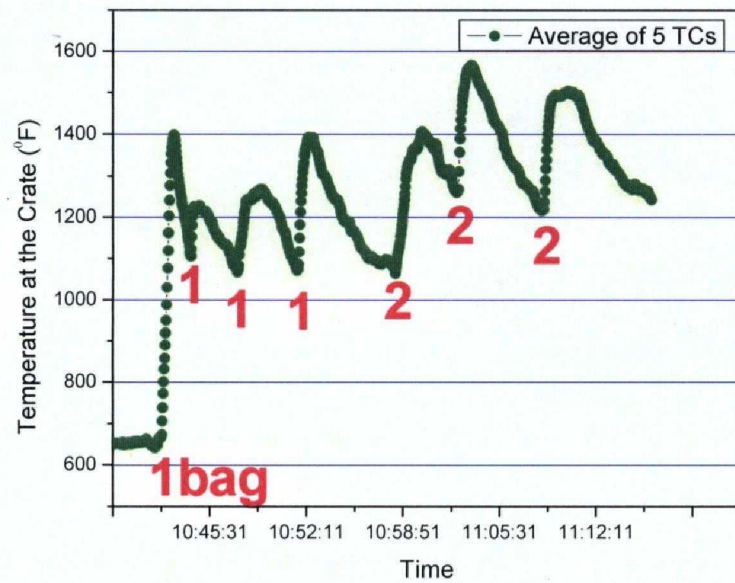
Ubbi OU3 Burn Chamber

Scoping tests to determine
temperature settings

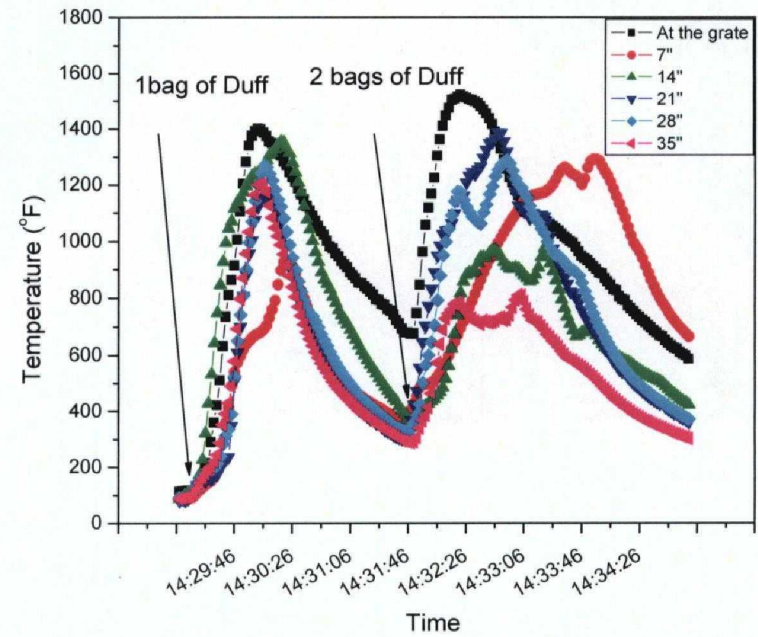
High Temperature Combustion Chamber Design



High Temperature Combustion Flame Temperature Results



Low temperature Results (Bottom of the Chamber Open)



Low temperature Results (Bottom of the Chamber Closed)

